



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Ralf RESKI et al.) Atty. Docket No.: STURK 0003
Serial No. 10/089,450)
Filed: March 29, 2002)
For: METHOD FOR PRODUCTION)
OF PROTEINACEOUS)
SUBSTANCES)
Date: June 12, 2002)

RECEIVED

SEP 09 2002

TECH CENTER 1600/2000

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

This is an Information Disclosure Statement with regard to the above-identified application. Copies of each of the documents listed in the attached Form PTO/SB/08A are attached.

Also attached is a copy of the Search Report issued on September 7, 2001 in the corresponding **international** application. Since all of the documents cited herein were cited in said Search Report, it is believed that the relevance of each document cited is clear from the Search Report.

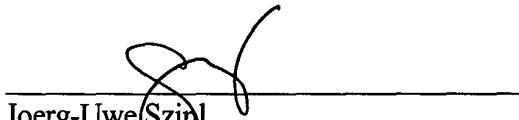
Accordingly, no further comment in regard to the disclosures of these documents is believed to be required.

It is respectfully requested that the attached documents be considered and officially cited, and that a copy of the Form PTO/SB/08A, initialed by the Examiner to indicate that the documents have been considered, be returned to the applicants.

It is believed that the present Information Disclosure Statement complies with the requirements of 37 C.F.R. §§ 1.97-8, but if a fee should be required, authorization is hereby given to deduct from Deposit Account No. 50-1281.

Respectfully submitted,

GRiffin & Szipl, PC


Joerg-Uwe Szipl
Reg. No. 31,799

GRiffin & Szipl, PC
Suite PH-1
2300 Ninth Street, South
Arlington, VA 22204

Telephone: (703) 979-5700
Facsimile: (703) 979-7429
Customer No.: 24203



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 5

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/089,450
				Filing Date	March 29, 2002
				First Named Inventor	Ralf RESKI et al.
				Art Unit	Unknown
				Examiner Name	Unknown
Sheet	1	of	5	Attorney Docket Number	STURK 0003

U.S. PATENT DOCUMENTS

RECEIVED

SEP 09 2002

TECH CENTER 1000/2900

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. 1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6
		Country Code ³ -Number ⁴ - Kind Code ⁵ (if known)				
	A	WO 9102066	02-21-1991			
	B	WO 9704122	02-06-1997			
	C	DE 19629402	02-05-1998			
	D	WO 9821348	05-22-1998			
	E	WO 9836085	08-20-1998			
	F	WO 9938990	08-05-1999			

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449B/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 5

Complete if Known

Application Number	10/089,450
Filing Date	March 29, 2002
First Named Inventor	Ralf RESKI et al.
Group Art Unit	Unknown
Examiner Name	Unknown

RECEIVED
SEP 9 2002

TECH CENTER 1600/2900

Attorney Docket Number STURK 0003

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
G	E. Reinhard und W. Kreis, Kultivierung von pflanzlichen Zellen im Bioreaktor, Bio. Engin., 5, S. 135-136 (1989)	
H	BORISJUK, N.V., ET AL.: "Production of recombinant proteins form plant root exudates" NATURE BIOTECHNOLOGY, Bd. 17, Mai 1999 (1999-05), Seiten 466-469, XP002169838;	
I	N. Ferrara et al., The vascular endothelial growth factor family of polypeptides, J. Cell. Biochem., 47, S. 211-218 (1991)	
J	H.-P. Mühlbach, Use of plant cell cultures in biotechnology, Biotechnol. Annu. Rev., 4, S. 113-176 (1998)	
K	WEI W S ET AL.: "A perfusion air-lift bioreactor for high density plant cell cultivation and secreted protein production" JOURNAL OF BIOTECHNOLOGY, NL,ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, Bd. 50, Nr. 2, 1. Oktober 1996 (1996-10-01), Seiten 225-233, XP004037059 ISSN: 0168-1656;	
L	DATABASE BIOSIS [Online] BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; Mai 1999 (1999-05) ZEIDLER MATTHIAS ET AL: "Transgene expression in the moss Ceratodon purpureus." Database accession no. PREV199900356531 XP002169839 & JOURNAL OF PLANT PHYSIOLOGY, Bd. 154, Nr. 5-6, Mai 1999 (1999-05), Seiten 641-650, ISSN: 0176-1617	
M	Y. Fujita und M. Tabata, in: Plant tissue and cell culture, plant science; Vol. 3, S. 169, C.E. Green et al. (Eds.), A. R. Liss Inc., New York (1987)	
N	M. Tabata und Y. Fujita, in: Biotechnology in plant science; S. 207-218, P. Day et al. (Eds.), Academic Press, Orlando (1985)	
O	M. Jaziri et al., Taxus sp. cell, tissue and organ cultures as alternative sources for taxoids production: a literature survey, Plant Cell Tiss. Org. Cult., 46, S. 59-75 (1996)	
P	FIREK S ET AL: "SECRETION OF A FUNCTIONAL SINGLE-CHAIN FV PROTEIN IN TRANSGENIC TOBACCO PLANTS AND CELL SUSPENSION CULTURES" PLANT MOLECULAR BIOLOGY, NL,NIJHOFF PUBLISHERS, DORDRECHT, Bd. 23, 1993, Seiten 861-870, XP002033959 ISSN: 0167-4412;	
Q	REUTTER, K., ET AL.: "Production of a heterologous protein in bioreactor cultures of fully differentiated moss plants" PLANT TISSUE CULTURE AND BIOTECHNOLOGY, Bd. 2, Nr. 3, 1996, Seiten 142-147, XP001002564	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



C mplete If Known

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 5

Application Number	10/089,450
Filing Date	March 29, 2002
First Named Inventor	Ralf RESKI et al.
Group Art Unit	Unknown
Examiner Name	Unknown

Attorney Docket Number STURK 0003

RECEIVED

SEP 09 2002

TECH CENTER 1600/2900

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T2
R	J. Berlin et al., Genetic modification of plant secondary metabolism: Alteration of product levels by overexpression of amino acid decarboxylases, in: Advances in Plant Biology, Studies in Plant Science, Vol. 4, S. 57-81, D.D.Y. Ryu und S. Furasaki (Eds.), Elsevier, Amsterdam (1994)		
S	A.S. Moffat, High-Tech plants promise a bumper crop of new products, Science 256, S. 770-771 (1992)		
T	J.K.-C. Ma et al., Generation and assembly of secretory antibodies in plants, Science 268, S. 716-719 (1995)		
U	P.C. Sijmons et al., Production of correctly processed human serum albumin in transgenic plants, Bio/Techn., 8, S. 217-221 (1990)		
V	A.-H. Salmanian et al., Synthesis and expression of the gene for human epidermal growth factor in transgenic potato plants, Biotechnol. Lett., 18, S. 1095-1098 (1996)		
W	E. Krebbers und J. Vandekerckhove, Production of peptides in plant seeds, Tibtech., 8, S. 1-3. (1990)		
X	K. Dalsgaard et al., Plant-derived vaccine protects target animals against a viral disease, Nat. Biotech., 15, S. 248-252 (1997)		
Y	N.S. Magnuson et al., Enhanced recovery of a secreted mammalian protein from suspension culture of genetically modified tobacco cells, Prot. Expr. Pur., 7, S. 220-228 (1996)		
Z	M.L. Shuler et al., Bioreactor engineering as an enabling technology to tap biodiversity: The case of taxol., Ann. N. Y. Acad. Sci., 745, S. 455-461 (1994)		
AA	M.G.K. Jones und K. Lindsey, Plant biotechnology, in: Molecular biology and biotechnology, J.M. Walker und E.W. Gingold (Eds.), 2.Aufl., Royal Soc. of Chem., Burlington House, London (1988)		
BB	R. Reski, Zell- und molekularbiologische Untersuchungen der cytokinin-induzierbaren Gewebedifferenzierung und Chloroplastenteilung bei Physcomitrella patens (Hedw.) B.S.G., PhD Thesis, Universität Hamburg (1990); Results published in: Marienfeld et al., Isolation of nuclear, chloroplast and mitochondrial DNA from the moss Physcomitrella patens, Plant Science, 61, 235-244 (1989)		

Examiner Signature	Date Considered
--------------------	-----------------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



+

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/089,450
(use as many sheets as necessary)		Filing Date	March 29, 2002
Sheet	4	First Named Inventor	Ralf RESKI et al.
		Group Art Unit	Unknown
		Examiner Name	Unknown
		Attorney Docket Number	STURK 0003
		SEP 09 2002	

RECEIVED

TECH CENTER 1600/2900

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Examiner Initials'	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	CC	N.W. Ashton et al., Analysis of gametophytic development in the moss, <i>Physcomitrella patens</i> , using auxin and cytokinin resistant mutants, <i>Planta</i> , 144, S. 427-435 (1979)
	DD	E. Wilbert, Biotechnologische Studien zur Massenkultur von Moosen unter besonderer Berücksichtigung des Arachidonsäurestoffwechsels, PhD Thesis, Universität Mainz (1991)
	EE	H. Rudolph und S. Rasmussen, Studies on secondary metabolism of <i>Sphagnum</i> cultivated in bioreactors, <i>Crypt. Bot.</i> , 3, S. 67-73 (1992)
	FF	N. Ferrara und W.J. Henzel, Pituitary follicular cells secrete a novel heparin-binding growth factor specific for vascular endothelial cells, <i>Biochem. Biophys. Res. Commun.</i> , 161, S. 851-858 (1989)
	GG	G. Martiny-Baron und D. Marmé, VEGF-mediated tumor angiogenesis: A new target for cancer therapy, <i>Curr. Opin. Biotechnol.</i> , 6, S. 675-680 (1995)
	HH	B.L. Fiebich et al., Synthesis and assembly of functionally active human vascular endothelial growth factor homodimers in insect cells, <i>Eur. J. Biochem.</i> , 211, S. 19-26 (1993)
	II	D. Mohanraj et al., Expression of biologically active human vascular endothelial growth factor in Yeast, <i>Growth factors</i> , 12, S. 17-27 (1995)
	JJ	Miyazono et al., Purification and properties of an endothelial cell growth factor from human platelets, <i>J. Biol. Chem.</i> , 262, S. 4098-4103 (1987)
	KK	Wilting et al., A morphological study of the rabbit corneal assay, <i>Anat. Embryol.</i> , 183, S. 1167-1174 (1991)
	LL	S. Kondo et al., The shortest isoform of human vascular endothelial growth factor/vascular permeability factor (VEGF/VPF121) produced by <i>Saccharomyces cerevisiae</i> promotes both angiogenesis and vascular permeability, <i>Biochim. Biophys. Acta</i> , 1243, S. 195-202 (1995)
	MM	G. Siemeister et al., Expression of biologically active isoforms of the tumor angiogenesis factor VEGF in <i>Escherichia coli</i> , <i>Biochem. Biophys. Res. Commun.</i> , 222, S. 249-255 (1996)

Examiner Signature		Date Considered
--------------------	--	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



